

COMMITTEE ON GOVERNMENT REFORM

Subcommittee on Energy and Resources

DARRELL ISSA, CHAIRMAN



Oversight Hearing:

“Hybrid Cars: Increasing Fuel Efficiency and Reducing Oil Dependence”

BRIEFING MEMORANDUM

**July 20, 2006, 2:00pm
Rayburn House Office Building
Room 2247**

Summary

Record oil and gasoline prices are magnifying the need for more fuel efficient automobiles. U.S. dependence on imported oil from unstable areas of the world and reliance on the hurricane-prone Gulf of Mexico region for refined petroleum products has reinforced the need to use fuels more efficiently. Almost 70 percent of oil consumed in the U.S. is used by the transportation sector.

Several technologies can help increase the fuel efficiency of the American auto fleet, and therefore increase energy security by reducing U.S. dependence on imported oil. Such technologies include bio-diesel fuel, hydrogen, ethanol, electric vehicles, and hybrid electric vehicles. However, many of these technologies are not yet cost effective or widely available. Increasing the number of hybrid electric vehicles on the road is one practical way to increase the fuel efficiency of the U.S. fleet in the near-term.

Types of Hybrid Electric Vehicles

Hybrid Electric Vehicles (HEVs, or hybrids) combine an electric motor and battery pack with an internal combustion engine. Hybrids are generally classified as (1) full hybrid, (2) mild hybrid, or (3) plug-in hybrid. A full hybrid is a vehicle that can move forward at low speeds without consuming any gasoline, such as a Toyota Prius or Ford Escape. Mild hybrids, like the Honda Civic, are vehicles that move from a standstill only if the internal combustion engine is engaged. Mild hybrids use the electric motor primarily to assist the gas engine when extra power is needed. Mild hybrids are further classified into the following subcategories:

- Stop/Start hybrid - This system shuts the internal combustion engine off and uses electricity from a battery when it would otherwise idle. The engine re-starts instantly on demand.
- Integrated Starter Alternator with Damping (ISAD) – This hybrid system allows the electric motor to help move the vehicle in addition to providing stop/start capability.
- Integrated Motor Assist (IMA) – The IMA hybrid system is similar to the ISAD but has a larger electric motor that provides more electricity that can be used to help move the vehicle.

Both full and mild hybrids require use of the gasoline internal combustion engine when reaching speeds greater than 20-25 mph.

Plug-in hybrid vehicles give the owner the option to charge the electric batteries using residential electric outlets. Plug-in hybrids have a larger electric battery system that allows the vehicle, once fully charged, to operate like a fully electric vehicle. Under 34 miles per hour (mph), the electric motor effectively powers the vehicle. Over 34 mph and during bursts of acceleration, the gasoline motor begins to help incrementally. When the electricity stored in the battery runs out, the gasoline engine starts and the plug-in hybrid vehicle operates like a regular hybrid.

Hybrid Electric Vehicle Market

Hybrids accounted for 1.2 percent of the total vehicles sold in model year 2005. However, the hybrid market has grown from two models and fewer than 10,000 vehicles sold in 2000 to 11 models and an estimated 212,000 vehicles sold in 2005. Furthermore, U.S. hybrid sales volumes are anticipated to grow by 268% between 2005 and 2012, according to the most recent update of the J.D. Power and Associates Automotive Forecasting Services Hybrid-Electric Vehicle Outlook.

Although hybrid cars have the potential to greatly increase the overall fuel efficiency of the nation's automobile fleet, the lack of hybrid vehicle production in the U.S. is a concern. Currently, Toyota is the hybrid market leader with 63.3 percent of the U.S. market, followed by Honda with 25 percent and Ford with 9.4 percent. Notably, Ford operates one of the few hybrid manufacturing facilities in the U.S. in Kansas City, Missouri. As illustrated in Table 1 below, American hybrid production greatly trails Japanese production in both the number of models and quantity.

**Table 1: Availability and Sales of Hybrid Electric Vehicles in the U.S.
(1st Quarter 2006)**

BRAND	AVAILABLE	ORIGIN	HYBRID SALES (1st Qtr 2006)
Toyota Prius	NOW	Japan	22,123
Toyota Highlander	NOW	Japan	7,881
Honda Civic	NOW	Japan	7,177
Lexus RX 400h	NOW	Japan	5750
Ford Escape	NOW	U.S.A.	4068
Honda Accord	NOW	Japan	1715
Honda Insight	NOW	Japan	210
Mercury Mariner	NOW	U.S.A.	205
Honda Fit	NOW	Japan	N/A
GM Silverado	NOW	U.S.A.	N/A
GM Sierra	NOW	U.S.A.	N/A
Nissan Altima	Late 2006	Japan	N/A
Toyota Camry	Late 2006	Japan	N/A
Lexus GS	Late 2006	Japan	N/A
Saturn VUE	Late 2006	U.S.A.	N/A
Dodge Ram	Late 2006	U.S.A.	N/A
Dodge Durango	2007	U.S.A.	N/A
Toyota Sienna	2007	Japan	N/A
Chevrolet Malibu	2007	U.S.A.	N/A
Porsche Cayenne	2008	Germany	N/A

Source: <http://www.hybridcars.com>

Benefits of Hybrid Electric Vehicles

Fuel Efficiency and Potential Cost Savings

Hybrids are, on average, about 30 percent more fuel efficient than traditional internal combustion gasoline engines, so fuel costs are significantly lower with hybrids than with conventional vehicles. While hybrids generally cost several thousand dollars more than comparable conventional vehicles, the higher price is offset to some degree by lower fuel costs and tax incentives, discussed in more detail below. The combination of fuel cost savings and tax incentives allows buyers of certain hybrid vehicles to recover the price premium. Buyers of two hybrid vehicle models (Toyota Prius and Honda Civic Hybrid) are currently able to recover the price premium of buying the automobile with fuel cost savings and tax incentives. See Table 2, below for a cost comparison of model year 2006 conventional and hybrid Honda Civic automobiles.

Table 2: Cost Difference for Hybrid (MY06) and Conventional (MY06) Honda Civic Sedan LX with automatic

	Cost in dollars
Hybrid purchase cost (MSRP)	22,150
Fuel cost savings	(4,300)
Federal tax credit (est.)	(2,100)
Hybrid net cost	15,750
Conventional purchase (MSRP)	17,510
Net cost difference	(1,760)¹

Source: Congressional Research Service

Further, converting a Toyota Prius or similar hybrid to a plug-in hybrid will increase its gasoline efficiency from nearly 50 miles per gallon (mpg) to 99 mpg, increasing fuel cost savings. However, the cost of converting vehicles from standard hybrid to plug-in hybrid is currently prohibitive at around \$10,000-\$12,000.

Reduced Dependence on Imported Oil

According to HybridCars.com, by the end of 2006 there will be nearly 700,000 hybrids on American roads. This represents approximately one-third of one percent of the 230 million vehicles in use. Given current trends of miles per person traveled, hybrids will save approximately 0.07 percent of fuel used by Americans—or nearly 100 million gallons in 2006. By the end of the decade, if current trends are maintained, there will be nearly 2 million hybrids on American roads. The total number of vehicles in the U.S. fleet is expected to grow from 230 million in 2006 to 250 million in 2010. Therefore, hybrids will have grown from 0.03 percent of vehicles in use in 2006 to 0.08 percent in 2010—with fuel savings of 300 billion gallons in 2010 or 0.2 percent of all fuel used by Americans.²

Given current trends in terms of vehicles in use and miles driven, as well as flat fuel economy trends for conventional and hybrid vehicles, fuel savings from the introduction of hybrids will reach 1 percent of all fuel used—over 2 trillion gallons—in about 20 years. At that point, Americans are expected to consume 80 trillion more gallons of gas than they do today. If these projections hold, hybrids will reduce the increasing rate of consumption rather than actually reducing (or even maintaining) today's rate of consumption. Most auto sales forecasters expect new hybrid sales to remain in the single digit percentage points for the next two decades. If hybrids could reach 10 percent penetration by 2010—requiring an aggressive increase in production and sales—then hybrid fuel savings would only then stem the growth in consumption and represent an effective measure for real reductions in gasoline usage.

¹ Based on \$2.78 per gallon of gasoline; ten year life; 15,000 miles per year; not discounted over time.

² Bradley Berman at HybridCars.com is the source of information found in the “Reduced Dependence on Imported Oil” section of this briefing memo. HybridCars.com based its estimates, in part, on information obtained from Dr. Walter McManus at the University of Michigan Transportation Research Institute.

Emission Reductions

Hybrid cars also reduce air emissions because they replace less efficient vehicles in the U.S. fleet. Based on market share and fuel consumption data used in the previous section, hybrid cars account for substantial reductions in emissions of greenhouse gases (primarily carbon dioxide) and air toxics such as benzene in comparison to non-hybrid internal combustion vehicles. For example, in 2006, hybrid cars are estimated to emit about 850,000 fewer tons of carbon dioxide and about 4,500 fewer tons of benzene than the same number of non-hybrid cars would have emitted. By 2010, hybrids would account for estimated reductions of over 2 million tons of carbon dioxide and about 11,000 tons of benzene, and by 2020 reductions are estimated to rise to over 8 million tons of carbon dioxide and about 49,000 tons of benzene.³

Use of Existing Infrastructure

An attractive feature of hybrids is that no new fueling infrastructure is needed, since these vehicles are fueled by gasoline or diesel. This allows hybrid owners to purchase and operate their vehicles anywhere in the country, and long-distance travel is not limited by the fueling infrastructure.

Other Benefits

Other benefits of owning a hybrid vary in different states. In certain states, hybrids are allowed to use the High Occupancy Vehicle (HOV) lanes regardless of the number of passengers. In addition, hybrid owners in certain Californian cities may park without depositing coins at on-and- off metered parking spaces.

Federal and State Government Hybrid Electric Vehicle Tax Incentives

Federal Incentives

The Energy Policy Act of 2005 created the Alternate Motor Vehicle Tax Credit to encourage the purchase of hybrid vehicles. This credit took effect on January 1, 2006. For most hybrid car buyers, the new credits are more valuable than the prior incentives, which were a reduction of taxable income.⁴ In order to qualify for the Alternate Motor Vehicle Tax Credit a consumer must:

- Purchase and take delivery of a qualifying vehicle on or after January 1, 2006.

³ Subcommittee staff used data provided by HybridCars.com and the University of Michigan Transportation Research Institute and carbon dioxide and benzene emission factors from EPA (available at: <http://www.epa.gov/oms/climate/420f05004.htm>, and <http://www.epa.gov/OMS/toxics.htm>, respectively), to calculate emission reduction estimates.

⁴ The previous tax deduction (eliminated in 2005) was more valuable for taxpayers who must pay the Alternative Minimum Tax or take a lot of deductions.

- Purchase the vehicle new, not used.
- Purchase the vehicle with the intent of using it, not reselling it.

The primary limitation of the credit is that the full amount only applies to the first 60,000 hybrids per carmaker, based on the quantity of hybrid vehicles manufactured and delivered to dealerships, rather than the number of hybrids sold. After the manufacturer hits that mark for a particular hybrid, the credit for that vehicle phases out over a 15-month period. The timing of the phase-out and amount of the credit during the phase-out period is unclear. According to Toyota, "the reductions may begin to apply as early as June 30, 2006 or September 30, 2006."⁵ Specific details of the Alternate Motor Vehicle Tax Credit include:

- The credit will reduce your regular income tax liability, but not below zero.
- If you are eligible for multiple tax credits, the hybrid tax credit is taken last after all the other credits (e.g., child care tax credit, mortgage credit, and retirement savings credit) have been taken. Any tax liability left over by these reductions will be the maximum dollar limit of your hybrid tax credit. If your hybrid tax credit exceeds your maximum dollar limit, the excess is not refundable, and is lost forever.
- The excess cannot be carried over to another year, or given away to another person.
- The credit will not reduce your alternative minimum tax, if that applies to you. As stated in Toyota's statement about the new tax credits: "The benefit of the hybrid vehicle tax credit will also be substantially reduced or eliminated if the individual purchaser is subject to the federal alternative minimum tax."⁶

State Incentives

Currently, 23 States and the District of Columbia offer incentives to purchase hybrids. These incentives range from exempting hybrids from excise taxes to sales tax credits. See Appendix A on pages 7-12 for incentives offered by states and the District of Columbia for hybrid vehicle purchases.

⁵ From: <http://www.hybridcars.com/tax-deductions-credits.html>

⁶ From: <http://hybridcars.com/tax.deductions-credits.html>

Hearing Focus

This hearing will assess the potential for hybrid vehicles to increase the overall fuel efficiency of the U.S. fleet and lessen the nation's dependence on imported oil, paying particular attention to issues regarding cost-effectiveness, market penetration, incentives, U.S. manufacturing capacity, and environmental benefits. This hearing will address the following questions:

- What are the potential benefits, in terms of fuel consumption and emission reductions, of increasing the number of hybrid vehicles in the U.S. fleet?
- What advances in hybrid technology are expected and by when?
- What is the projected market share for hybrids in the short and long term?
- Will hybrid technology become more cost competitive in comparison to conventional internal combustion technology?
- Why has the US auto industry lagged in developing hybrid cars?
- What further actions can Federal and state governments take to encourage consumers to purchase hybrid vehicles?

Witnesses:

- **Dr. Andrew Frank**
Director, University of California-Davis Hybrid Electric Research Center
- **Mr. David Hermance**
Executive Engineer, Toyota Motor North America
- **Mr. John German**
Manager, Environmental and Energy Analyses, American Honda Motor Company
- **Don MacKenzie**
Vehicles Engineer, Union of Concerned Scientists

STAFF CONTACT

Larry Brady, Staff Director
Subcommittee on Energy and Resources
B-349C Rayburn House Office Building

202.225.6427 / 202.225.2392 fax

Appendix A

Incentives Offered by States and the District of Columbia for Hybrid Vehicle Purchases⁷

Arizona: As of Jul. 9, Arizona Revised Statutes from the 47th session Chapters 28-2416 and 28-737 allow hybrid vehicle owners with an \$8.00 special plates/hybrid sticker that is displayed on said vehicle to use the High Occupancy Vehicle (HOV) lanes regardless of the number of passengers. Arizona has not instituted this policy as it is awaiting clarification of the federal Hybrid HOV waiver from the Environmental Protection Agency.

California: Hybrid Car owners who have purchased their hybrids from San Jose dealers are exempt from local parking fees. For eligibility, contact Jason Burton (408) 794-1427, jason.burton@ci.sj.ca.us.

If you own a Zero Emission Vehicle or Super Ultra Low Emission Vehicle as defined by the California Air Resources Board, you may purchase a California Clean Air Vehicle Decal from the California Department of Motor Vehicles. Once you have purchased and affixed the decal to your vehicle per DMV instructions, you can park without depositing coins at on- and off-street metered parking spaces throughout the City of Los Angeles.

For more information, visit:

<http://www.lacity.org/LADOT/FreePark.htm>

Colorado: The Colorado Department of Revenue offers a tax credit for the purchase of a hybrid electric vehicle (HEV), up to \$4,713.00. For more information, including tax credit amounts for Model Year 2002 and 2003 HEVs, please visit www.revenue.state.co.us/fyi/html/income09.html. (Reference: Colorado Revised Statutes (CRS) §39-22-516 and §39-33-102.)

Colorado has passed legislation that would allow the hybrids to use the HOV lanes with single occupants. While a federal waiver has been passed, the Colorado Department of Transportation is analyzing that bill and state for compatibility. The EPA has up to 180 days to give the states guidelines for which vehicles would be allowed into HOV lanes pursuant to the new federal law.

Connecticut: The purchase of hybrid electric vehicles (HEVs) with a fuel economy rating of at least 40 miles per gallon (mpg) and the original purchase of dedicated natural gas, LPG, hydrogen, or electric vehicles are exempt from sales tax.

On June 6, 2005, the city of New Haven passed a law permitting hybrid vehicles registered in New Haven free parking at metered spots within the city. The ordinance will take effect within one month and only apply to alternative fuel vehicles registered in New Haven. Owners will have to come to City Hall to receive a decal which will be attached

⁷ Appendix A is from <http://www.hybridcars.com/tax-deductions-credits.html>

to the vehicle. Motorists will still need to obey posted time limits and must park in legal spots. For more information contact DSLap@Newhavenct.net

District of Columbia: Within the DMV Reform Amendment Act Of 2004 went into effect on April 15, 2005. One provision exempts owners of hybrid and other alternative fuel vehicles from excise tax on their vehicle, and will reduce the vehicle registration charge, while excise tax rates for heavy passenger vehicles (over 5,000 pounds) will increase to 8% (from 7%). For more information, contact Elizabeth.Berry@dc.gov or Corey.Buffo@dc.gov

Florida: Inherently low-emission vehicles (ILEVs) and hybrid electric vehicles (HEVs) may be driven in high occupancy vehicle (HOV) lanes at any time regardless of vehicle occupancy. ILEVs and HEVs that are certified and labeled in accordance with federal regulations may be driven in HOV lanes at any time, regardless of the number of passengers in the vehicle. The vehicle must have a decal issued by the Florida Division of Motor Vehicles, obtained for a \$5 fee, which must be renewed annually. For more information, please contact the Florida Division of Motor Vehicles at dmv@hsmv.state.fl.us or (850) 922-9000. (Reference Florida Statutes 316.0741)

Georgia: Hybrid electric vehicles (HEVs) shall be authorized to use high occupancy vehicle lanes, regardless of the number of passengers if the U.S. Congress or U.S. Department of Transportation approve such authorization through legislative or regulatory action. (Reference Georgia Code Section 32-9-4) The term 'alternative fuel vehicle' is expanded to include HEVs. A HEV is defined as a motor vehicle, which draws propulsion energy from onboard sources of stored energy, which include an internal combustion or heat engine using combustible fuel and a rechargeable energy storage system. HEVs must also meet federal Clean Air Act and California emissions standards and must have a fuel economy that is 1.5 times the Model Year 2002 EPA composite class average for the same vehicle class. (Reference Georgia Code Section 40-2-76)

Illinois: The Illinois Alternate Fuels Rebate Program (Rebate Program) provides rebates for 80% of the incremental cost of purchasing an AFV or converting a vehicle to operate on an alternative fuel. The maximum amount of each rebate is \$4,000. Eligible vehicles include natural gas, propane, and electric. Gasoline-electric hybrid vehicles are not eligible.

Louisiana: The Louisiana Department of Natural Resources offers a state income tax credit worth 20% of the cost of converting a vehicle to operate on an alternative fuel, and 20% of the incremental cost of purchasing an Original Equipment Manufacturer (OEM) alternative fuel vehicle (AFV). For the purchase of an OEM AFV, the tax credit cannot exceed the lesser of 2% of the total cost of the vehicle or \$1,500. Only those vehicles registered in Louisiana can receive the tax credit. For more information, please contact the Louisiana Department of Natural Resources at (225) 342-1399 or the Louisiana Department of Revenue at (225) 219-0102, option 2. (Reference Revised Statutes (RS) S47:38 and S47:287.757). The Louisiana department of revenue concluded that "The cost of equipment involved in converting to a hybrid vehicle or installed by a manufacturer of

hybrid vehicles can be used to compute this credit." Note: The Revenue Ruling No. 02-019 November 8, 2002 established the department's position on allowing hybrids vehicles to receive this credit. However, a Revenue Ruling does not have the force and effect of law and is not binding on the public. It is a statement of the department's position and is binding on the department until superseded or modified by a subsequent change in statute, regulation, declaratory ruling, or court decision.

Maine: Maine law pursuant to MRSA 36, sections 1752 and 1760-79 allows a partial sales tax credit of approximately \$500 for hybrid cars that do not have a comparable vehicle model, such as the Toyota Prius and Honda Insight. It allows a credit of approximately \$300 for cars that have a comparable gasoline-powered model, such as the hybrid Honda Civic. For more information, contact Lynne Cayting of the Department of Environmental Protection at (207) 287-7599, or via email at lynne.a.cayting@state.me.us For information about the tax exemption for hybrid electric vehicles, visit www.maineenvironment.org/energy/TaxCredit.htm. Download form at <http://www.state.me.us/revenue/forms/sales/str46a.pdf>

Maryland: Maryland H.B. 61 exempts qualified hybrid electric vehicles from motor vehicle emissions testing requirements.

Owners of hybrid cars will get discounts on parking at the 15 city-owned parking garages in Baltimore. The plan cuts between 32- and 85 dollars from the monthly fees for owners of the fuel-efficient vehicles. Baltimore will limit participation to 200 vehicles and the program will apply only to monthly, contract parking. Drivers of the three most fuel-efficient models can apply for a decal that will let them park in designated spots in the city's garages.

Massachusetts: For the years 2006-2010, individuals that purchase a hybrid or alternative fuel vehicle, which can be powered by ethanol, low-sulfur diesel, compressed natural gas, liquefied natural gas, and hydrogen will register for a special placard and receive a number of incentives, including: an income tax deduction of \$2000; the right to travel in HOV lanes regardless of passengers; and discounts or free parking in municipalities which choose to participate.

The bill will require that five percent of all new state agency "fleet vehicles" be hybrids or run on alternative fuel, with 50 percent of the state fleet reliant on alternative fuels by 2010. A \$10 million bond would establish a fund controlled by the Division of Energy Resources to assist municipalities and regional transit authorities in building alternative fuel stations on public lands and acquiring alternative fuel vehicles or hybrids.

Corporations with fleets of more than 50 comprised of at least 10 percent alternative fuel vehicles would receive a tax credit of half the difference in price between those vehicles and their conventional gasoline counterparts.

New Jersey: On May 4, 2006, the New Jersey Turnpike Authority, which administers the turnpike and the Garden State Parkway, voted to allow hybrid vehicles to use the high occupancy vehicles lanes on the turnpike. The ruling's effect may be limited since the turnpike, which sees an average of 700,000 drivers daily, has HOV lanes only between Interchange 11 in Woodbridge and Interchange 14 in Newark going both northbound and southbound. The Garden State Parkway does not have car pool lanes.

Decals are not required. Turnpike Authority officials said state police do not anticipate any problems identifying which cars are hybrids

New Mexico: Hybrid electric vehicles (HEVs) with a U.S. Environmental Protection Agency (EPA) fuel economy rating of at least 27.5 miles per gallon are eligible for a one-time exemption from the motor vehicle excise tax and state sales tax.

In Albuquerque, hybrid cars are exempt from parking meter fees. For more information, visit: <http://www.cabq.gov/parking/HybridPermits.html>.

Or call The City of Albuquerque's parking office at 505-924-3950. Contact Deborah James: Djames@cabq.gov (505) 768-3036

New York: New York's Alternative Fuel (Clean Fuel) Vehicle Tax Incentive Program, which offered tax credits and a tax exemption for purchasing new hybrid electric vehicles (HEVs), have expired. In Jan. 2006, Governor Pataki proposed new incentives. For more information, please contact the New York State Energy Research & Development Authority (NYSERDA) at 866- NYSERDA, via email at info@nyserda.org or visit the web site at www.nyserda.org

Clean Pass is a program allowing eligible low-emission, energy-efficient vehicles to use the 40-mile Long Island Expressway High Occupancy Vehicle (LIE/HOV). Clean Pass is a multi-agency pilot program partnering three New York State agencies, the State Department of Transportation (NYSDOT), the State Department of Motor Vehicles (DMV), and State Department of Environmental Conservation (DEC).

Oregon: A Residential Tax Credit of up to \$1,500 is available for the purchase of a HEV or dual-fuel vehicle. For more information, contact Deby Davis of the Oregon Department of Energy at (503) 378-8351, via email at deby.s.davis@state.or.us. You can also find detailed information about qualifying vehicles at: <http://egov.oregon.gov/ENERGY/TRANS/hybridcr.shtml>

A Business Energy Tax Credit is available for the purchase of hybrid electric vehicles (HEVs) and dual-fuel vehicles, the cost of converting vehicles to operate on an alternative fuel, and the cost of constructing alternative fuel refueling stations. The tax credit is 35% of the incremental cost of the system or equipment and is taken over five years. For more information, please contact Justin Klure of the Oregon Department of

Energy at (503) 373-1581, via email at justin.klure@state.or.us or visit the Web site at www.energy.state.or.us

Pennsylvania: Pennsylvania's Department of Environmental Protection will offer an opportunity to Commonwealth residents to apply for a rebate to assist with the incremental cost for the purchase of a new hybrid, bi-fuel, dual-fuel or dedicated alternative fuel vehicle. The rebate amount is \$500. The rebate will be offered as long as funds are available. Rebates will be offered on a "first come, first served" basis. Rebate applications shall be submitted no later than six months after the purchase.

Press release issued by the Commonwealth of Pennsylvania on March 9, 2006: The program has been so successful; the state is expected to run out of rebate money sometime in April. DEP Secretary Kathleen A. McGinty said the commonwealth already has awarded more than \$1.3 million in rebates from the \$1.5 million allotted for the program for the 2005-06 fiscal years. Another \$1 million will become available for the fiscal year beginning July 1. Because buyers have six months from the time of the purchase to apply for the rebates, people buying hybrid electric and alternative fuel vehicles after the current funding runs out still will be able to apply for rebates when the programs reopens. For more information, visit www.dep.state.pa.us

Texas: The City of Austin's "Drive Clean--Park Free" program gives city-registered owners of hybrid vehicles that receive an EPA air pollution score of 8 or better a \$100 pre-paid parking cards to park in any of the city's 3,700 parking meters. Owners must submit an application to the city and receive a bumper sticker showing their participation in the program. Eligible vehicles must be purchased at certified dealerships within the Austin City Limits. For more information go to <http://www.ci.austin.tx.us/airquality/parkfree.htm>

Utah: The state provides an income tax credit for 50% of the incremental cost (\$3,000 maximum) of a clean-fuel vehicle built by an OEM and/or an income tax credit for 50% of the cost (\$2,500 maximum) of the after-market conversion of vehicles purchased after January 1, 2001 and registered in Utah. If not previously used, the tax credit on used vehicles may be claimed. Tax credits are available for businesses and individuals and may be carried forward up to five years. Tax credits are not available for electric hybrids, except the Honda Civic hybrid. Documentation must be provided as described in the Utah state tax form TC-40V. For more information, please contact Ran Macdonald of the Utah Division of Air Quality at (801) 536-4071, or via email at rmacdonald@utah.gov (Reference Utah Code 59-7-605 and 59-10-127).

Vehicles with clean fuel group license plates are authorized to travel in HOV lanes regardless of the number of occupants. The clean fuel plate may be purchased for \$10 from any Motor Vehicle Division office by presenting a clean special fuel certificate. This incentive expires December 31, 2005. For more information, please contact the Utah State Tax Commission's Motor Vehicle Division at (800) DMV-UTAH or (801) 297-

7780, or visit the Web site at www.dmv.utah.gov/licensespecialplates.html (Reference Utah Code 41-1a-1211, 41-6-53.5, and 63-55-241).

On Aug. 11, Mayor Rocky Anderson scheduled a meeting with top city officials to discuss the creation of a free parking incentive for hybrid vehicles in Salt Lake City. City transportation engineer Kevin Young confirmed to the Desert Morning News that his department has prepared an ordinance that would enact the free parking.

Virginia: AFVs displaying the Virginia 'Clean Special Fuels' license plate can use the Virginia HOV lanes, regardless of the number of occupants, until July 1, 2006. Dedicated AFVs and the Toyota Prius, and Honda Insight and Civic hybrid electric vehicles qualify. For more information, please visit the Virginia Department of Motor Vehicles Web site at www.dmv.state.va.us/webdoc/citizen/vehicles/cleanspecialfuel.asp (Reference Virginia Code §33.1-46.2 and §46.2-749.3)

Washington: Electric, CNG, and LPG vehicles are exempt from emission control inspections. Effective June 13, 2002, hybrid motor vehicles that obtain a rating by the U.S. Environmental Protection Agency of at least 50 miles per gallon of gas during city driving are also exempt from these inspections. (Reference RCW 46.16.015)

West Virginia: The State of West Virginia allows a credit for the purchase of a new motor vehicle that runs on an alternative fuel or for the conversion of a traditionally fueled motor vehicle to an alternatively fueled motor vehicle. Alternative fuel types include compressed natural gas, liquefied natural gas, liquefied petroleum, methanol, ethanol, coal-derived liquid fuels, electricity, solar energy and fuel mixtures containing at least 85 percent alcohol. The tax department includes hybrids in this tax credit. Print out the necessary tax form. For more information see: <http://www.state.wv.us/taxdiv>